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Lessons Learned from Enterprise Mobility Projects 2012

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SURVEY OVERVIEW

Over the past decade, and especially within the past couple of years, many companies have implemented enterprise mobility solutions. Individuals involved are often pioneers in their companies. They have often been early adopters and suffered the consequences and recognized the rewards. In this report these pioneers share what they have learned in the form of advice to those that follow.

It is important to note that this is a collection of advice based upon a variety of different experiences in different circumstances and environments. Two different people can give conflicting advice. That is OK. The advice given should help you learn, debate and decide how it can best be applied to your unique projects. Simply pondering this advice has value and will help you be better prepared for your own mobility projects.

This survey was conducted during July of 2012. The survey participants responded from invitations published on enterprise mobility related sites, forums, blogs and newsletters. We did not follow any particular scientific methodology or formal survey protocols. It is simply a survey of the opinions of the 120+ that participated.

I hope you find this information useful.

Sincerely,

~Kevin Benedict, Writer and Enterprise Mobility Analyst

QUESTION: WHAT ADVICE DO YOU HAVE?

Over 120 people share their advice on implementing enterprise mobility in the following sections.

GENERAL ADVICE

1. It is important to take a broad view of your mobile needs so you can develop a company-wide strategy, rather than disparate apps across the company that are a huge burden to maintain and upgrade.
2. Do the research, set expectations and build a showcase. Only by doing and living it will you discover the full potential (and limitations) of mobility solutions. While it may be great to start with a “blue-sky” vision, you need to eat the elephant in small bites. Hence the strategy should start out with some parameters around what is achievable, realistic and that provides an ROI rather than promising the earth. This will also help with managing the complexity of developing a mobile strategy as the options to be considered are narrowed.
3. Whoever develops the mobile strategy should be independent of any vendor selection to ensure the right solution is provided for your business.
4. While it may seem logical to consider a single strategy for mobile deployments it should be realized that the needs of different mobile workers can be quite unique based upon their roles, and that the search for a single Swiss-army-knife strategy may lead to delays in deployment. Every day delayed in deployment means you are not reaping the benefits the mobile strategy will deliver.
5. A company that is entering into mobile development must first consider the challenges for an end-to-end implementation, including target users, supported operating systems, mobile security and devices.
6. Think long term, preferably over a five-year window. Don't spend a lot of time trying to determine a comprehensive ROI, because the intangible benefits cannot be quantified. Mobility is required - accept that.
7. Don't limit your mobile application buying choices to just your ERP vendor. They often don't have the expertise in the areas most important to you.
8. Choose just one mobile operating system to support for your enterprise. This limits investment requirements and maximizes control by the enterprise.
9. Mobility, as a concept, is new and very transient. Don't believe a person or company that tries to sell you a solution based upon a five-year roadmap. No one knows what the mobility world will look like in five years.
10. A best-of-breed mobility solution is no good if it does not integrate well and support your backend solutions and unique business processes.
11. Find experienced mobility partners to assist with your mobile application design, development, implementation and support. Each of these areas has their own risks that can be minimized with experience.

12. Consider current and future technology trends, and then decide which mobile vendors are best able to support them. Select technology that was designed and developed specifically for mobile. Often legacy platforms will develop mobile add-ons and extensions that are not reasonably capable of supporting future trends and developments in mobility.
13. Forget wasting time on a mobile strategy today. The field is too immature. Find small use-cases on which to gain experience and insight. Then use these experiences to build a strategy as tools and platforms mature and consolidate – think big but start small.
14. If you develop mobile apps without a strategy, it will not be a sustainable model. It is key to develop a mobile strategy first, and then select a mobile platform that provides the desired ROIs with the lowest TCO. This also means the IT department needs full alignment with the other departments (marketing, sales, supply chain, etc.). Select the vendor with the best vision and capability to deliver on it.
15. Don't develop an enterprise-wide mobile strategy based upon the smartphone in your pocket or tablet in your brief case.
16. Educate the business on what is possible with mobile technologies now and in the near future so they can share the vision and contribute.
17. Create a list of possible use-cases, potential ROIs and identify what it would take to deliver them so they can be prioritized.
18. Appoint a dedicated mobility champion or manager.
19. Reach out to a wide community within the enterprise using online collaboration tools to exchange ideas and brainstorm about potential priorities, strategies, tools and platforms. Don't limit these discussions to closed door meetings. Utilize your institutional knowledge and intellectual assets.
20. Embrace the fact that many users are passionate and emotional about mobility. It has changed their lives in meaningful ways. Don't create policies that restrict users from exploring the power of mobility! Mobility is changing entire industries, and we need everyone's contributions and enthusiasm.
21. Develop a short, medium and long-term vision for mobility in your company.
22. Re-think your overall IT strategy with mobilization as a key infrastructure and support issue. Understand how things must change to meet this new reality.
23. The size of the company, the industry and the diversity of different business units all need to be considered when developing a mobile strategy. Companies may need to be prepared to support multiple strategies with multiple development teams and areas of expertise.
24. Understand an enterprise wide strategy can be an over-arching set of policies and security measures, but individual lines of business or operating units will have different needs, priorities, budgets and time-lines so a corporate wide strategy needs flexibility.
25. Plan to mobilize your entire work force within three years. Start by mobilizing sales, field services, and HCM. Look for ways to introduce horizontal productivity gains across the entire enterprise with simple mobile apps.

26. Start with small pilots while the company is formulating the strategy to actually see and experience all aspects of mobility.
27. Learn by doing.
28. Extend your solution to the point of activity. With today's technology, any redundant data capture should be considered bad.

ADVICE ON MOBILE PLATFORMS

1. There is a difference between a mobility platform, mobile application development tools and mobile device management solutions. It is important that you recognize these categories, as each has its own set of features and best of breed vendors.
2. Mobility has a very specific set of characteristics and presents requirements, which your legacy IT infrastructure was probably never designed to address. Don't assume your existing VPN, device management, messaging and applications architecture will work over occasionally connected low-bandwidth and high latency networks.
3. Ensure your underlying infrastructure is right to support mobility before you start developing applications.
4. Establish a solid, standardized enterprise-wide infrastructure to meet the needs of mobility, and then you will have more freedom of choice and fewer underlying issues in the future.
5. For specific and limited mobile interactions with enterprise applications and data, recognize and consider alternative options to MADPs (mobile application development platforms). There are low cost mobile application development tools that can provide great tactical value.
6. Ask yourself this question, "Will the mobile platforms and apps I choose today be adaptable to the technologies coming tomorrow?" Consider each part of your enterprise-wide mobile infrastructure with this question in mind.
7. Empower a team to make horizontal mobile decisions across IT, not isolated mobile decisions within IT disciplines like security, hardware, support, app development, etc.
8. Ensure each component of your mobility platform can scale to meet your current and future requirements.
9. The *Mobile Platform* is just a set of architecture principles. Choosing the right architecture is what is important.
10. Ensure that using lightweight (RESTFUL Services) integration is at the forefront of your mind. Ensure your solutions implementation team has experience integrating a MAJOR ERP solution with a mobile platform.
11. Evaluate MADP (mobile application development platforms) on the basis of future scalability, cross platform support, implementation speeds, mobile app administration simplicity, deployment strategies, costs and organizational needs.

ADVICE ON MOBILE SECURITY

1. Define and extend your security policy to the mobile world.
2. One of the biggest challenges companies face is BYOD (bring your own devices). BYOD requires the right security policies, right security solutions, device management and a strategy to manage these applications after deploying on devices.
3. Data leak prevention is a myth. Any DLP software can be circumvented quickly. Mobile users need to be educated on proper security and made aware of risky behaviors.
4. Develop a mobility policy that can be governed.
5. Use digital certificates as a means to identify trusted mobile devices for access to more secure areas of your infrastructure.
6. Understand what is possible to secure and manage and what is not. Be firm in what an enterprise can support and what it cannot.
7. Identify the mobile and remote laptop security protocols that already exist in the business, and then understand how they can be used to support new mobile operating systems.
8. Recognize there is an entire technology and platform category dedicated to mobile device security. These can be found under MDM (mobile device management) and MAM (mobile application management) searches.
9. Companies usually require three different categories of mobile solutions: complex, productivity and consumer. For example - a manufacturer may have a complex environment that requires enterprise owned mobile devices and an enterprise platform with enterprise quality control, security and management. Simple consumer type apps supported by BYOD policies won't work in this environment.

ADVICE ON MOBILE ROIS

1. Seek to prioritize mobile apps and projects that provide quick ROIs across LOBs (line of business) to maximize your returns. High value mobile apps don't always need to involve high levels of cost and complexity.
2. Small productivity improves across many users often equals great returns.
3. Deliver mobile apps that add measurable value in the short term. Look for quick wins. Start with apps that are relatively easy to develop and deploy in order to create user acceptance, and allow time to understand the challenges of introducing mobility within a wider enterprise community.
4. Survey end users to determine areas of inefficiency and the information and processes that would offer the most value if mobilized. Separate the needs of true mobile workers, from simply "un-tethered" mobile workers just seeking conveniences. The ROIs are likely to be much different for each category of worker.
5. Find one priority use-case with a high value potential that justifies setting up the infrastructure. Once the infrastructure is in place, all following apps can be implemented at a fraction of the time and cost.

6. Don't underestimate the cost to support mobile apps, especially on employee owned devices. Develop collaboration sites, forums and self-help portals to relieve your IT support staff of some of the mobile device support issues. Operating systems like Android have far too many variations and versions for helpdesks to try to handle today.
7. Don't re-invent the wheel. Identify where others have been successful and achieved good ROIs and replicate it.
8. Does it increase sales?
9. Does it improve productivity?
10. Does it decrease costs?
11. Does it improve collections?
12. Does it improve service?
13. What is the TCO of the proposed solution over three to five years?
14. What are the opportunity costs of not implementing mobile solutions? How will inaction impact customer service and your competitive position in the market?

ENTERPRISE MOBILITY IMPLEMENTATION ADVICE

1. Start small and appreciate that enterprise mobility is not about shrinking an ERP process to a mobile device – it is about mobilizing key elements that meet 80 percent of process scenarios in terms of volume.
2. Start small and implement a low cost proof of concept based on a cloud mobile solution.

ENTERPRISE MOBILITY DEVELOPMENT ADVICE

1. Never assume always connected to the Internet (offline use is a requirement).
2. Develop applications around real business need, not what IT thinks the business needs.
3. Understand and leverage the context of the mobile user in order to simplify the user interface and the app behavior.
4. Look for the right mobile application development tools. If developing mobile apps means hiring programmers, you don't have the right tools.
5. Mobile applications require constant changes, and the right development tools should provide you with a high degree of flexibility and configuration options.
6. Do not rule out the use of native mobile apps. They deliver great functionality with a better user experience.
7. The app itself should be simple and intuitive. Just because it is pulling ERP data does not mean it should deliver that data in the same manner as the ERP. You should not have to teach a user how to use a mobile application.
8. Enterprise mobility is evolving so rapidly that future proofing your strategies is critical. Seek technologies like HTML5 that can minimize your risks and TOC (total cost of ownership).

ADVICE ON MOBILE PROJECT MANAGEMENT

1. Before starting an enterprise mobility project, ensure you have strong management buy-in and acceptance, and during the project communicate and update all stakeholders regularly to keep buy-in.
2. Discuss which mobile devices and operating systems you need to support up front on a project.
3. Focus on the “change management” needed in the business when implementing mobile solutions, especially around policy and behavioral changes.

CONCLUSION

I invite you to use this survey of advice often as a talking-points guide for internal discussions as you are preparing your enterprise mobility strategy. This collection of advice represents the experiences and lessons learned of over 120 people.

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